A Computer-Based System for Empowering Persons Living with AIDS/HIV Infection Through Education and Social Support

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CHESS, the Comprehensive Health Enhancement Support System, is a PC-based system designed to provide people living with AIDS/HIV infection with the information, referrals, decision support and social support necessary for them to become empowered partners in the management of their own disease and health care. Individual CHESS work stations are installed either in patients' homes or in community sites like HIV clinics, community centers and AIDS Service Organizations, and are linked together through modems to a central "host" computer which supports the communication with other work stations. CHESS provides a wide range of services to its users:

Questions and Answers is a compilation of answers to over 400 common questions about AIDS/HIV infection. Answers are brief 1- to 5-screen overviews, with references to where more detailed information can be found, both in other CHESS services and outside CHESS.

Instant Library is a database of over 300 articles, brochures and pamphlets. Articles cover a broad range of topics and levels of complexity, and are drawn from scientific journals, newsletters and the popular press.

Getting Help/Support helps users understand what health and social services are available, how they work, how to find a good provider and how to be an effective and active consumer.

Personal Stories are real-life accounts of living and coping with AIDS/HIV infection. Over 20 stories were collected and written by trained journalists. Users can read 300-500 word overviews, and more detailed "expansions" on specific topics.

Ask an Expert allows users to ask AIDS/HIV experts anonymous questions and receive confidential responses within 24 hours.

Discussion Group allows anonymous, non-threatening communication among people infected with HIV. Message senders are identified only by a code name. Users share information, experiences, hopes and fears, give and receive support, offer different perspectives on common issues. A trained facilitator monitors groups to keep discussion flowing smoothly.

Assessment allows users to assess risk of exposure to or transmission of HIV. Users answer a series of detailed questions on behaviors which transmit HIV. A Bayesian model then predicts the risk based on the reported behaviors. Users are offered detailed feedback on their risk factors and how to reduce them.

Decision Aid helps people through hard decisions. Users consider their various options and the considerations that affect which option they choose. Two different types are available. "Tailored" programs help users with specific decisions like who to tell about being HIV-positive. The second model can be used for any decision. Both programs use multi-attribute utility models for the analyses.

Action Plan helps users implement a new decision. Action Plan is based on change theory. It asks users how they propose to implement a decision, helps them analyze their strengths and weaknesses, supports and barriers, predicts the likelihood of success and suggests ways they can strengthen their prospects.

Health Charts allow a user to automatically keep a diary of important health-related information including, symptoms, medications, weight, etc.

Dictionary provides easy-to-understand definitions of over 850 health and AIDS-related terms.

CHESS has been evaluated with over 250 men and women living with AIDS/HIV infection, and has been demonstrated to have positive impacts on their health status, health behaviors and health service utilization. CHESS is available now through a research consortium of health care providers and employers who provide it as a service to their patients and employees.